Keynote Presentation: Gap Analysis Observations

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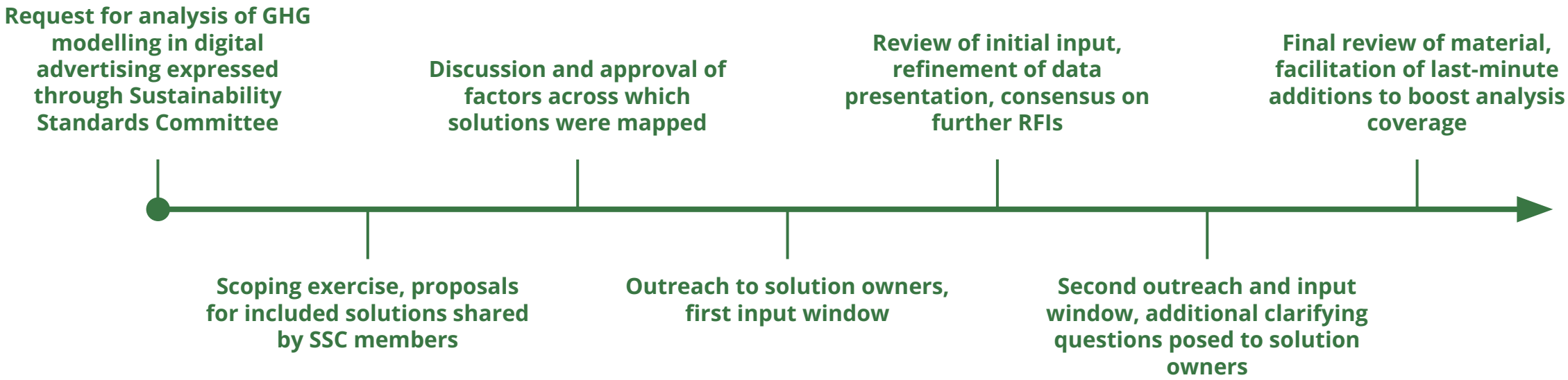
OBJECTIVE

Understanding the level of greenhouse gas (GHG) emissions associated with digital advertising is a necessary condition for environmental footprint reduction to be achieved. As the industry expands on its offering of sustainability-related solutions, marketers may find themselves in need of a reference tool to assist them in tailoring their strategy to their objectives. IAB Europe's mapping is intended to support industry professionals in navigating the range of emissions models available and understanding how they may differ and why they may arrive at varying estimates.

A second objective of the mapping is to uncover the main challenges in generating robust GHG estimates for digital advertising products and provide a basis for further work and industry collaboration. Four main areas of focus surfaced in exchanges with vendors regarding how their models can be improved.

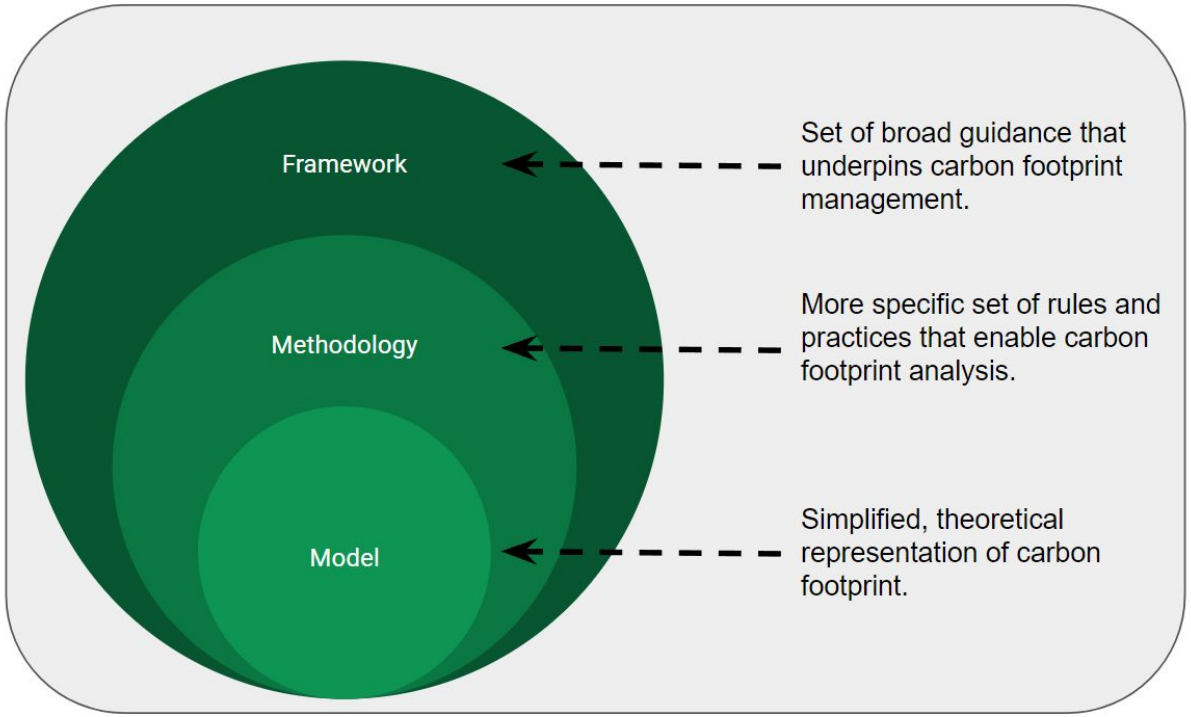
HOW WAS THE MAPPING DEVELOPED?



WHICH SOLUTIONS WERE INCLUDED IN THE MAPPING?

The Sustainability Standards Committee opted to maintain the following categorisation of GHG estimation solutions, offered initially through a Seed Packet, i.e. a brief on sustainability distributed to our members.

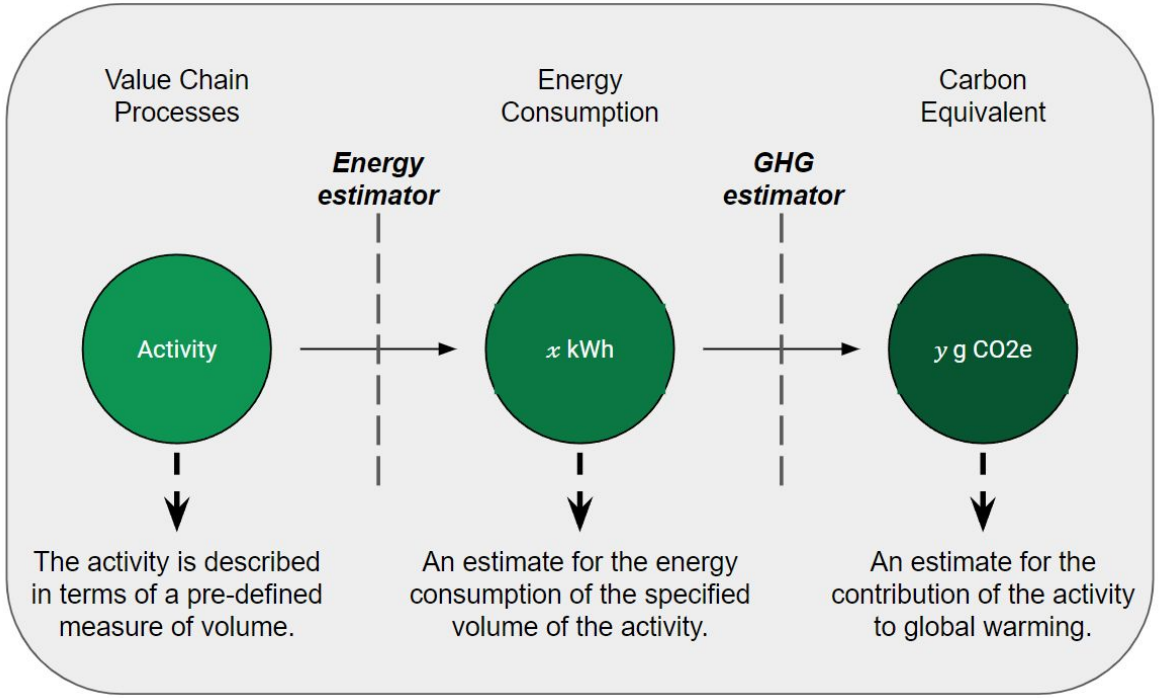
Frameworks are broad, formalised sets of guidance that describe how an entity should act to deal with - that is measure, report, and mitigate - its greenhouse gas emissions. They may be public and underlie many different GHG estimation solutions or be developed as proprietary guidance. **Methodology** refers to the set of practices, rules, and guidelines on which an entity bases its organisational, operational, and analytic actions when measuring its GHG emissions. It describes the data that is collected to describe specific value chain activities and how estimates for GHG impact are calculated. A **model or estimator** is a tool that accepts inputs that describe activity in the value chain (e.g. number of impressions, creative file size) and returns an estimate for the associated GHG footprint. Models are usually built by applying a framework and methodology.



HOW DO GHG ESTIMATORS WORK?

Most, if not all GHG models are summarized by the following graphic. Value chain activity data that represents the volume of different processes is collected (or assumed to be close to a predetermined figure). Then, the energy consumption associated with this activity is estimated, usually employing standard assumptions regarding the processes' energy intensity. Finally the energy consumption is tied to emissions, most often through a regional grid intensity database.

GHG models can vary significantly in terms of boundaries, data, scope, and results. It should be noted that models may vary due to discrepancies beyond those surfaced in the mapping. Even a seemingly minor tweak in the set of assumptions, such as the location of the grid for servers, can significantly alter results. Thus, the need for transparency and consistency is highlighted.



Mapping Factors		
Supply Chain Scope Evaluation of which stages in the digital advertising supply chain are covered.	**Device Lifecycle** Evaluation of which lifecycle stages are covered and what types of emissions are considered (e.g. use phase vs manufacturing).	**Purpose** Clarification on the use case for the solution as presented by the owner.
Transparency Evaluation of disclosure with respect to underlying assumptions, figures, and calculations.	**Inclusion of Uncertainty** Evaluation of extent to which uncertainty of the GHG model is understood, accounted for, and represented in the solution.	**Continuity of Development** Clarification on whether and how the owner is developing and updating the solution, as well as their involvement in adoption by the market.
Data Integration Evaluation of extent to which model lends itself to use by firms at various levels of sustainability advancement.	**Geographical Flexibility** Clarification on the markets that the solution is built for and whether it can be adapted to other locations.	**Compliance Orientation** Clarification on whether the solution is intended to enable compliance with non-financial disclosure regulation.

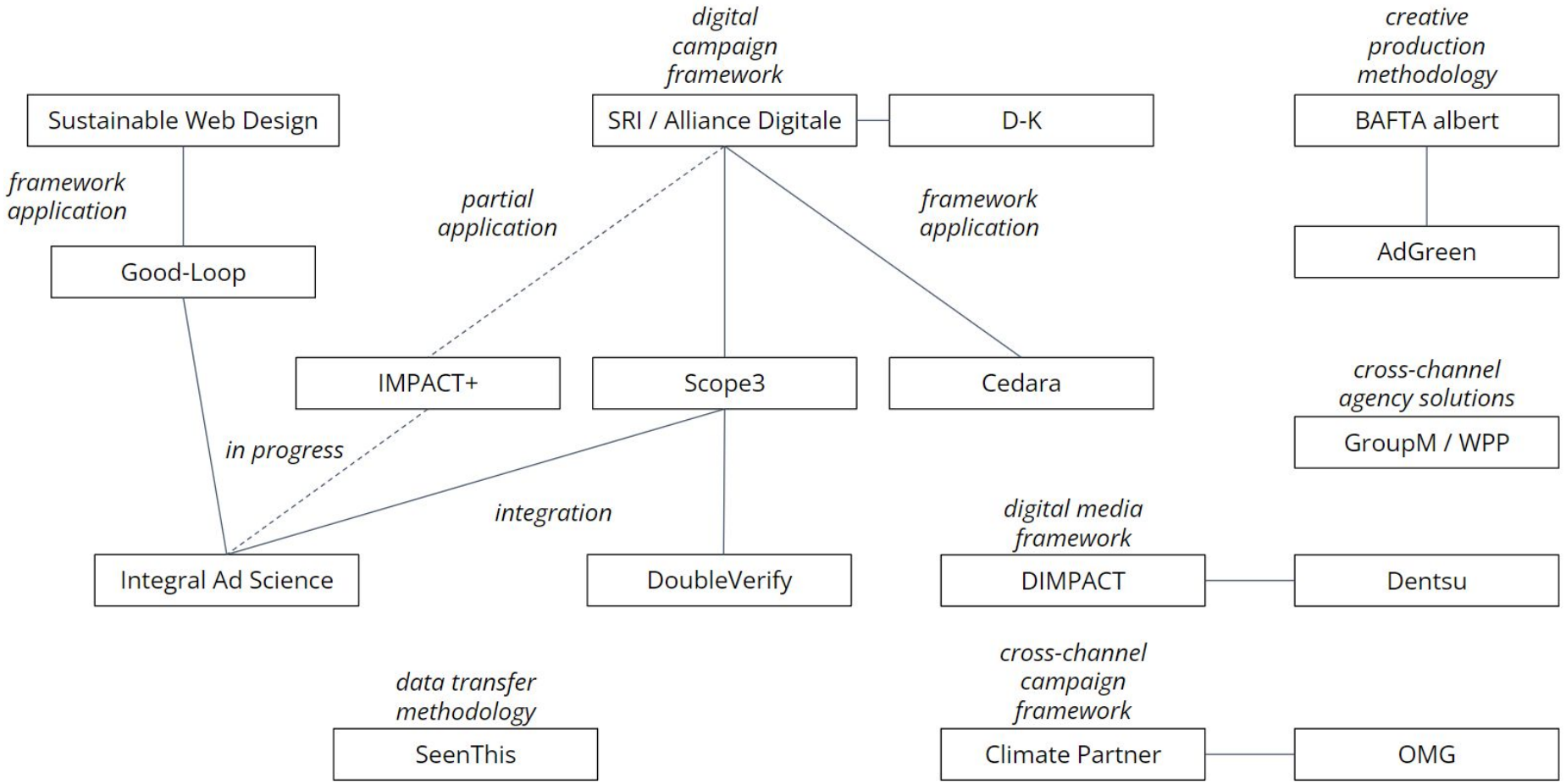
THE ORGANIZATIONS THAT MADE THE MAPPING POSSIBLE:

SRI / Alliance Digitale
ClimatePartner
DIMPACT
GroupM / WPP
Omnicom Media Group
Dentsu
AdGreen
Scope3
Good-Loop
IMPACT+
DK
SeenThis
Cedara

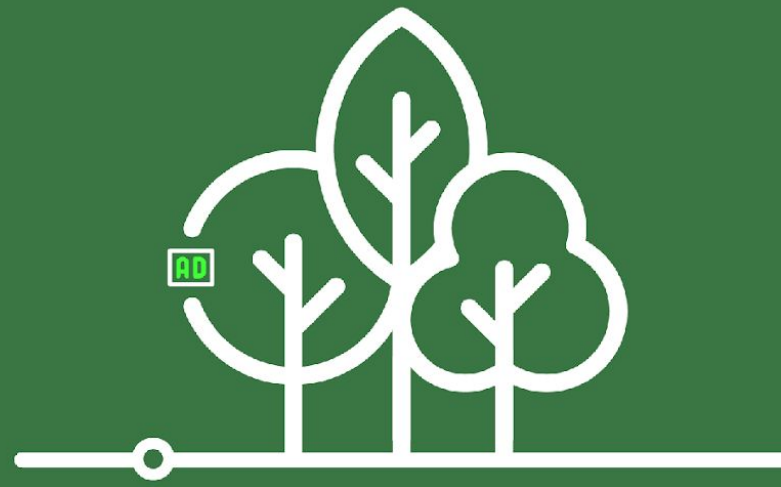
IAB EUROPE CORPORATE MEMBERS, OR NOT
ADVERTISING GIANTS, OR STARTUPS
CAMPAIGN LEVEL, OR SPECIFIC PROCESS
PAY TO PLAY, OR FREE OF CHARGE
EXCLUSIVELY DIGITAL, OR OMNICHANNEL

DRIVING UNDERSTANDING OF DIGITAL'S ENVIRONMENTAL FOOTPRINT
FACILITATING TRANSPARENCY

HOW THEY ARE INTERCONNECTED:



SUMMARY OF RESULTS



SUPPLY CHAIN, DEVICE LIFECYCLE

The vast majority of considered solutions cover ad allocation & delivery, and consumer view in terms of supply chain stages. In our categorization, these include activity to allocate ad inventory (incl. programmatic), to distribute creatives from to the end user (e.g. ad servers, network transmission), and to consume the creatives on the end user device (e.g. mobile phone power consumption).

All solutions account for use-phase emissions of devices, i.e. emissions associated with energy consumption during the device's operation. Fewer emissions account for embodied emissions, including the carbon footprint associated with the manufacture and disposal of devices. Most solution owners indicated that their decision was based on their understanding of LCA data robustness.

TRANSPARENCY, DATA INTEGRATION

Included solutions were based on public or private frameworks, academic or private research, or developed as proprietary work. Some solution owners are still unable to provide full documentation regarding their frameworks, methodologies, or models. Still, every solution owner included in the report provided detailed responses to our questions, powering this mapping. It should be noted that following our initial RFI, multiple solution owners released documentation.

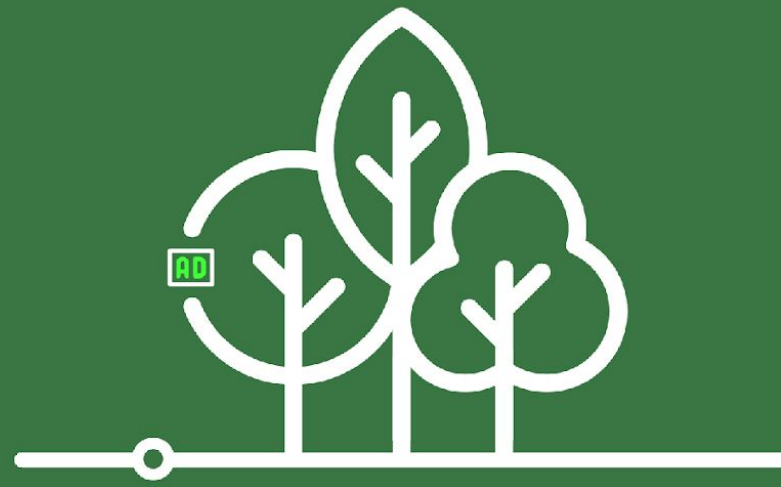
Most solutions are adaptable and can support estimation based on varying degrees of data granularity. An important feature, seeing as firms' level of data readiness and resource allocation on sustainability varies significantly. The mapping indicates whether model parameters can be customized and whether default values are available, as well as some of the ways in which models are adapted and parameters are determined (e.g. custom supply chain mapping / API integration).

GEOGRAPHICAL FLEXIBILITY, COMPLIANCE ORIENTATION

Virtually all solutions rely on regional emissions intensity figures sourced from a small collection of free or paid databases. They rely on a common global factor as a fallback should regional values not be available. It should be noted that the intensity values and temporal granularity may vary significantly by region and database.

Most solution owners indicated that their GHG estimates could potentially assist firms in meeting compliance requirements, such as non-financial disclosure obligations. In some cases, they offered actual examples of firms including GHG estimates produced by their solution in public disclosures. These are presented in the mapping. We expect the list of examples to grow as additional disclosure obligations are mandated and GHG solution adoption grows.

GAP ANALYSIS



WHERE MUST WE FILL THE GAP?

Data Availability - additional work is required to increase transparency and facilitate the exchange of data that accurately describes value chain activities and their environmental intensity.

Methodological Alignment - a standardised framework can create consistency, ease comparisons, and accelerate industry-wide progress.

Accounting for Uncertainty - corporate emissions reports, LCA databases, etc. may not offer information on how accurate the figures they present are.

Geographical Discrepancies - data availability, application of standards (e.g. ads.txt) varies, mostly outside Europe.

WE WILL CONTINUE TO SUPPORT INFORMED DECISION-MAKING IN THE DIGITAL ADVERTISING ECOSYSTEM.

The first edition of IAB Europe's mapping of GHG estimation solutions in digital advertising is just the beginning. We will continue to iterate on the deliverable, reflecting evolving solutions and questions about them. Our aim is to expand the report's coverage and depth while keeping it accessible to industry professionals, and track how the industry is working to address the identified challenges.